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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/465,242 | 12/15/1999 | Bruce E. Flinchbaugh | TI-27768 | 8650 |

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| EXAMINER |
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MOE, AUNG SOE

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| ART UNIT | PAPER NUMBER |
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2612

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/465,242

Applicant(s)

FLINCHBAUGH, BRUCE E.

Examiner

Aung S. Moe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 7 and 8 is/are allowed.
- 6) ☐ Claim(s) 1-11 and 15-20 is/are rejected.
- 7) ☐ Claim(s) 12-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Please note that this application has been transferred to a different Examiner (Aung S. Moe).

Response to Arguments

1. Applicant's arguments filed 7/21/2004 have been fully considered but they are not persuasive.

As for claims 1-6, 11, 15-17 and 20, the Applicant alleged in page 7 of the remarks that "it is visual information from the scene that is detected and evaluated, renders it novel over the Potts '956".

In response, the Examiner respectfully disagrees because "a video information" provided to the device (28) for detecting and evaluating of facial characteristics and specific criteria (i.e., Fig. 5, flesh tone color detection) is considered "visual information" as claimed. Thus, the "video information" of Potts '956 anticipated the claimed "visual information".

Moreover, the Applicant alleged in page 8 of the remarks that Potts '956 does not disclose the "step of recording an image of a scene responsive to the evaluating of visual information determining that the scene includes information representative of a human facial characteristic and that satisfies a specified criteria."

In response, the Examiner respectfully disagrees because as shown in Figs. 3-5 and further disclosed in col. 7, lines 40+ that the recording step is performed in response to evaluating of the visual/video information to determine that the scene includes information

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representative of a human facial characteristic (i.e., face detection and location analysis) and that satisfies a specified criteria (i.e., such as “flash tone color detection” performed by the module 102 as discussed in Fig. 5 to determining “a specified criteria”; see col. 8, lines 60+) (i.e., col. 7, lines 45+) by the module (102) of the video base locator 60. In other words, the recoding step is performed **after** the evaluating of visual/video information of a human facial characteristic is determined to be satisfied to specific criteria, thus, it is cleared that recording step is **responsive** to the evaluating steps as claimed.

In addition, the Applicant alleged in page 9 of the remarks that the combination of cited references (i.e., Potts ‘956, Maurer ‘231 and others) fail to show “the deciding of whether to record an image of a scene responsive to the evaluating of detected visual information. . .”.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the deciding of whether to record an image of a scene responsive to the evaluating of detected visual information) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In this case, the present claimed invention (i.e., claims 1 and 15) merely recited that “recording steps is responsive to the evaluating steps” and such features are clearly disclosed by Potts ‘956 as discussed above.

In view of the above, the present claimed invention is rejected as follows:

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-6, 11-13, 15-17 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Potts et al. (US #6,593,956 B1).

Regarding claim 1, Potts '956 teaches a method for operating a camera (Figs. 1 & 25), comprising the steps of:

responsive to an operator action and detecting visual information from a scene (Figs. 2-3, sound waves from a speaker are detected by audio source locator 28 and processing unit 20 and the video information detected by the device 60; see col. 6 line 16 – col. 7 line 22);

evaluating the detected information relative to a human facial characteristic (Figs. 3-4, video face location results) and a specified criteria (Fig. 5, flesh tone color detection) (col. 7 line 55 – col. 8 line 49; col. 9 line 3 – col. 10 line 62; col. 12 line 13 – col. 13 line 15);

continuing the detecting and evaluating steps (col. 7 lines 32-54); and

responsive to the evaluating step determining that the visual information (i.e., the video information) from the scene includes information that is representative of a human facial characteristic and that satisfies a specified criteria (col. 7 line 55 – col. 8 line 49; col. 9 line 3 – col. 10 line 62; col. 12 line 13 – col. 13 line 15; col. 17 line 34 – col. 19 line 65), recording an image of the scene (col. 7 lines 45-48).

As to claim 2, Potts teaches that said detecting step includes the step of detecting an image of radiation from the scene which includes the visual information representative of a facial

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characteristic (col. 7 line 55 – col. 8 line 49; col. 9 line 3 – col. 10 line 62; col. 12 line 13 – col. 13 line 15; col. 17 line 34 – col. 19 line 65).

As to claim 3, Potts teaches that said evaluating step includes the steps of identifying in the image of radiation at least one pattern representative of a face, and evaluating the pattern relative to the specified criteria (col. 7 line 55 – col. 8 line 49; col. 9 line 3 – col. 10 line 62; col. 12 line 13 – col. 13 line 15; col. 17 line 34 – col. 19 line 65).

As to claim 4, Potts teaches that the specified criteria includes a size limit criteria, and wherein said evaluating step includes the step of rejecting each identified pattern which is representative of a face but which fails to satisfy the size limit criteria (col. 10 lines 7-52; col. 21 line 57 – col. 22 line 45).

As to claim 5, Potts teaches said evaluating step includes the steps of identifying in the image of radiation a plurality of patterns each representative of a respective face, and evaluating each such detected pattern relative to the specified criteria (col. 7 line 55 – col. 8 line 49; col. 9 line 3 – col. 10 line 62; col. 12 line 13 – col. 13 line 15; col. 17 line 34 – col. 19 line 65).

As to claim 6, Potts teaches that said evaluating step includes the steps of identifying in the image of radiation a plurality of patterns each representative of a respective face, thereafter using a further criteria to select a subset of the patterns, and then evaluating only the selected patterns in the subset relative to the specified criteria (col. 7 line 55 – col. 8 line 49; col. 9 line 3 – col. 10 line 62; col. 12 line 13 – col. 13 line 15; col. 17 line 34 – col. 19 line 65).

As to claim 11, Potts teaches that the specified criteria is whether a face is oriented toward the camera (col. 2 lines 18-30), and wherein said evaluating step includes the steps of identifying at least one face in the information from the scene, and analyzing whether each such

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identified face is oriented to face substantially toward the camera (col. 12 lines 13 – col. 13 line 47; col. 20 lines 26-58; col. 21 line 15-56; col. 22 lines 16+).

Regarding claim 15, Potts teaches a camera (Figs. 1 and 25), comprising: an operator actuatable element (microphone array 12); an image detector (camera 14); a memory for storing digital images (col. 7 lines 45-49);

a control circuit, coupled to the operator actuatable element and to the image detector, and comprising: a memory for storing digital images (col. 7 lines 45-49); and

a processor, for controlling the image detector to detect visual information from a scene (i.e., noted the detection of video signals by the device 60 of Fig. 3) responsive to operator actuation of the element, and for evaluating the detected information relative to a human facial characteristic and a specified criteria (i.e., Figs. 4 and 5), and for responsive to the evaluating step determining that the visual information from the scene includes information that is representative of a human facial characteristic and that satisfies a specified criteria (col. 7 line 55 – col. 8 line 49; col. 9 line 3 – col. 10 line 62; col. 12 line 13 – col. 13 line 15; col. 17 line 34 – col. 19 line 65), recording an image of the scene in the memory (col. 7 lines 45-49).

As to claim 16, Potts teaches that said image detector detects an image of radiation from the scene (col. 6 lines 16-43).

As to claim 17, Potts teaches a microphone (Figs. 1 and 25, microphone array 12), coupled to the control circuit, for detecting audible sounds from the scene.

As to claim 20, Potts teaches that the specified criteria is whether a face associated with the facial characteristic is oriented to face substantially toward the camera (col. 2 lines 18-30; col. 12 lines 13 – col. 13 line 47; col. 20 lines 26-58; col. 21 line 15-56; col. 22 lines 16+).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9-10 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potts '956 in view of Maurer (US #6,272,231 B1).

As to claims 9 and 10, the claims differs from Potts in that they further require that the specified criteria is whether an eye is open or a mouth is closed, and wherein said evaluating step includes the steps of identifying at least one eye or one mouth in the visual information from the scene, and analyzing whether each such identified eye is open or mouth is closed. However, the limitations are well known in the art as shown in Maurer '231.

In the same field of endeavor, Maurer '231 teaches an apparatus for sensing a person's facial movements, features or characteristics comprising detecting and evaluating a person's face and corresponding facial features (col. 3 lines 13-53). Maurer '231 also teaches that the apparatus evaluates whether an eye is open or a mouth is closed (See Figs. 13-15; col. 11 lines 20-45). In light of the teaching from Maurer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the digital camera taught in Potts by having evaluating a human facial characteristic which satisfies the specified criteria whether an eye is open or a

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mouth is closed so as to implement the digital camera with a convenient and efficient facial feature sensing.

As to claim 18, see the Examiner's comments in the rejection of claim 9.

As to claim 19, see the Examiner's comments in the rejection of claim 10.

Allowable Subject Matter

4. Claims 7-8 are allowed.

3. Claims 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aung S. Moe whose telephone number is 703-306-3021 (or 571-272-7314). The examiner can normally be reached on Mon-Fri (9-5).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929 (or 571-272-7308). The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Aung S. Moe
Primary Examiner
Art Unit 2612

A. Moe
February 3, 2005